CENTRAL FAX CENTER

SEP 1 3 2006

Docket No. 4605-001

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of

John BLUMENTHAL et al.

Confirmation No. 3576

U.S. Patent Application No. 10/647,895

Group Art Unit: 3617

Filed: August 26, 2003

Examiner: Andrew WRIGHT

For:

METHOD OF AND APPARATUS FOR AERATING BODIES OF WATER

REPLY BRIEF

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Further to the Examiner's Answer of July 13, 2006 in connection with the aboveidentified application on appeal, herewith is Appellant's Reply Brief.

CERTIFICATION OF FACSIMILE TRANSMISSION

I HEREBY CERTIFY THAT THIS PAPER IS BEING FACSIMI-

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ARGUMENT

Page 3 of the Examiner's Answer states claim 15 is rejected under 35 U.S.C. 102 (b), while page 4 states claim 15 is rejected under 35 U.S.C. 103(a). In the rejection under 35 U.S.C. 103 (a), the Examiner states: "Springston discloses the elements of claim 15." There is no other rationale for the rejection of claim 15 under 35 U.S.C. 103 (a). Hence, it appears that the only basis for rejection of claim 15, as set forth in the Examiner's Answer, is under 35 U.S.C. 102 (b). Consequently, Appellant will deal with the rejection of claim 15 only on the basis of 35 U.S.C. 102 (b) because there is no attempt to establish a prima facie case of obviousness with respect to the rejection of claim 15 under 35 U.S.C. 103 (a).

To support the rejection of claim 15 under 35 U.S.C. 102 (b), the Examiner relies on *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). In relying on the Otto decision, the Examiner states, "In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art." Thus, the Examiner relied on the portion of the Otto decision relating to methods of making. None of the claims involved in this appeal is concerned with a method of making. Hence, the relied upon portion of *In re Otto* is irrelevant.

Reliance on the 1967 decision of *In re Casey* is improper. There are subsequent decisions, cited by Appellants in their main brief, that indicate the law has changed since the Casey decision.

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In re Swinehart, 166 F 2d 210, 169 USPQ 226 (CCPA 1971) must be considered as having a substantial bearing on the relevancy of Casey. Prior to the Swinehart decision, it was the thinking of many practitioners that claimed functional statements would not be considered. The Court noted the Appellant argued that the requirement of claim 24 for the composition of matter to be transparent to infra-red rays was not a functional statement. The Court did not agree with Appellant and specifically held that the claimed requirement for the composition of matter to be transparent to infra-red rays was a functional limitation. The Court noted that the only difference between the prior art and the claimed subject matter was the functional requirement of transparency to infra-red rays. The Court held the functional requirement had to be considered and that functional statements were important to distinguish the Swinehart composition of matter over the prior art. The Examiner's Answer fails to consider the Swinehart citation or provide a distinction between the Casey and Swinehart decisions.

The Examiner's Answer also fails to consider and/or distinguish over the decision by the Court of Appeals for the Federal Circuit of *In re Mills* 915 F 2d 680, 16 USPQ 2d 1430 (Federal Circuit 1990). The Court described the essence of the Mills invention as the ability to aerate a cementitious composition by driving an output pump having a capacity greater than the feed rate of ingredients supplied to a mixing chamber such that air is drawn into the composition. Appellants also provide the ability to aerate a material, namely a body of water being traversed by a water craft in a forward direction. A pumping arrangement carried by the moving craft includes a sheath including a propeller to produce particular functions, namely (a) suck water into the

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interior of a sheath via at least one opening, (b) force the water upwardly, (c) force the upwardly forced water through another opening in the sheath for causing the water forced through the another opening to have a speed greater than the speed of the water sucked into the sheath and cause air bubbles to be induced in the water above the another opening. In Springston, the propellers do not turn while a boat carrying the Springston structure is moving. Because the Appellants' claimed watercraft is moving forward while the propeller is turning, enhanced aeration of the water is provided.

The requirement for the watercraft to move in the water to provide water aeration is similar to the requirement in the claim considered by the Court *In re Mills*, i.e., a gear box that enables the pumping <u>capacity</u> of a pump means to be greater than the feed rate of ingredients provided to the mixing chamber. In other words, in the claim considered by the Court in Mills, there is no positive statement that the pump means is operating to have a speed greater than the feed rate of the ingredients supplied to the mixing chamber provided by the feed means. Instead, the Mills claim indicates the capacity of the pumping means has this characteristic. Similarly, in the Appellant's claim 15, the defined pumping arrangement is adapted to aerate the water, for aeration purposes, while the boat has the capacity to move.

As the Blumenthal Declaration indicates, the structure disclosed by Springston et al. has been used for many years. It has not been used on moving watercrafts and is incapable of use as a de-icer on moving watercraft, as explained in Mr. Blumenthal's Declaration. It remained for Mr. Blumenthal and his colleague to arrive at an apparatus that provides water aeration.

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The rejection of claim 20, on page 5 of the Examiner's Answer, indicates

Springston discloses a device that operates at a desired depth of three to four feet

below the water surface. The Answer states this disclosure does not limit the

Springston structure and does not preclude shallower depths. However, a narrow claim

cannot be properly rejected on a disclosure of a broad concept. Hence, Springston's

disclosure of suspending the device three to four feet below the water surface does not

meet the requirement of claim 20 for the outlet to be four to six inches below the water

surface.

In rejecting claims 20 and 21, the Office Action states that in the transient state of lowering the Springston pumping arrangement from the surface to the desired depth, the outlet will necessarily pass through the four to six inch depth and the inlet will pass a depth of 24 to 30 inches. However, this statement ignores the requirement of claims 20 and 21 for the outlet to be four to six inches from the surface during steady state operation and for the inlet to be 24 to 30 inches below the surface during steady state operation.

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Based on the foregoing reversal of the rejections all the Appellant's claims 15-17, 20, 21, and 31-34 is in order.

Respectfully submitted,

LOWE HAUPTMAN & BERNER, LLP

Allan M. Lowe

Registration No. 19,641

Randy Noranbrock Registration No. 42,940

Customer Number: 22429 1700 Diagonal Road, Suite 300 Alexandria, Virginia 22314

(703) 684-1111

(703) 518-5499 Facsimile Date: September 13, 2006

AML/mps